	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	616	calcineurin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:29			0
2	BRS	L2	0	calcineurin same (endogenous adj inhibitor)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:29			0
3	BRS	L3	179	calcineurin same inhibitor	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:29			0
4	BRS	L4	0	calcipressin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:29			0
5	BRS	L5	7	csp-1	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:30			0
6	BRS	L6	0	3 same 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:30			0
7	BRS	L7	0	nucleotide same 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:31			0
8	BRS	L8	0	(encoding adj sequence) same 4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/11/16 11:31			0

=> d his

(FILE 'HOME' ENTERED AT 11:33:50 ON 16 NOV 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
11:34:13 ON 16 NOV 2002
L1 14036 S CALCINEURIN
L2 28 S L1 (P) (ENDOGENOUS INHIBITOR)
L3 18 S CALCIPRESSIN
L4 229 S CSP-1
L5 0 S L4 (P) L2
L6 2 S L3 (P) (NUCLEOTIDE OR ENCODING SEQUENCE)
L7 2 DUPLICATE REMOVE L6 (0 DUPLICATES REMOVED)
L8 6 DUPLICATE REMOVE L3 (12 DUPLICATES REMOVED)
L9 6 S L8 NOT L7

=> log y

```
FILE 'HOME' ENTERED AT 11:33:50 ON 16 NOV 2002

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 11:34:13 ON 16 NOV 2002

FILE 'CAPLUS' ENTERED AT 11:34:13 ON 16 NOV 2002
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FILE 'AGRICOLA' ENTERED AT 11:34:13 ON 16 NOV 2002

=> s calcineurin
L1        14036 CALCINEURIN

=> s l1 (p) (endogenous inhibitor)
L2           28 L1 (P) (ENDOGENOUS INHIBITOR)

=> s calcipressin
L3           18 CALCIPRESSIN

=> s csp-1
L4          229 CSP-1

=> s l4 (p) l2
L5            0 L4 (P) L2

=> s l3 (p) (nucleotide or encoding sequence)
L6            2 L3 (P) (NUCLEOTIDE OR ENCODING SEQUENCE)

=> duplicate remove l6
PROCESSING COMPLETED FOR L6
L7            2 DUPLICATE REMOVE L6 (0 DUPLICATES REMOVED)

=> d l7 1-2 ibib abs

L7   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:441566  CAPLUS
DOCUMENT NUMBER:          137:245197
TITLE:                    The DSCR1 (Adapt78) isoform 1 protein calcipressin 1
                          inhibits calcineurin and protects against acute
                          calcium-mediated stress damage, including transient
                          oxidative stress
AUTHOR(S):                Ermak, Gennady; Harris, Cathryn D.; Davies, Kelvin J.
                          A.
CORPORATE SOURCE:         Ethel Percy Andrus Gerontol. Cent., Div. Mol.
                          Computational Biol., Univ. South. California, Los
                          [illegible]

DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Although DSCR1 (Adapt78) has been assocd. with successful adaptation to
     oxidative [illegible]
```

contradictory findings has been tested. In fact, DSCR1 (Adapt78) has not yet been proved to provide protection against acute oxidative stress or calcium stress. We have addressed this question using cross-adaptation to H2O2 and the calcium ionophore A23187, stable DSCR1 (Adapt78) transfection and over-expression in hamster HA-1 cells, 'tet-off' regulated DISR1 (Adapt78) isoform transgene expression in human PC-12 cells, and DSCR1 (Adapt78) antisense oligonucleotides to test the ability of the DSCR1 (Adapt78) protein product calcipressin 1 (a calcineurin inhibitor) to protect against oxidative stress and calcium stress. Under all conditions, resistance to oxidative stress and calcium stress increased as a function of DSCR1 (Adapt78)/calcipressin 1 expression and decreased as gene/protein expression diminished. We conclude that cells may transiently use increased expression of the DSCR1 (Adapt78) gene product calcipressin 1 to provide short-term protection against acute oxidative stress and other calcium-mediated stresses whereas chronic overexpression may be assocd. with Alzheimer disease progression.
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:633308 CAPLUS
DOCUMENT NUMBER: 134:1784
TITLE: Identification and characterization of a highly conserved calcineurin binding protein, CBP1/calcipressin, in Cryptococcus neoformans
AUTHOR(S): Gorlach, Jenifer; Fox, Deborah S.; Cutler, N. Shane; Cox, Gary M.; Perfect, John R.; Heitman, Joseph
CORPORATE SOURCE: Departments of Genetics, Medicine, Duke University Medical Center, Durham, NC, 27710, USA
SOURCE: EMBO Journal (2000), 19(14), 3618-3629
CODEN: EMJODG; ISSN: 0261-4189
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Calcineurin is the conserved target of the immunosuppressants cyclosporin A and FK506. Using the yeast two-hybrid system, we identified a novel calcineurin binding protein, CBP1, from the pathogenic fungus Cryptococcus neoformans. We show that CBP1 binds to calcineurin in vitro and in vivo, and FKBP12-FK506 inhibits CBP1 binding to calcineurin. Cryptococcus neoformans cbp1 mutant strains exhibit modest defects in growth under stress conditions and virulence, similar to but less severe than the phenotypes of calcineurin mutants. Saccharomyces cerevisiae mutants lacking the CBP1 homolog RCN1 are, like calcineurin mutants, sensitive to lithium cation stress. CBP1 shares a central peptide sequence motif, SPPxSPP, with related proteins in S.cerevisiae, Schizosaccharomyces pombe, Drosophila melanogaster, Caenorhabditis elegans and humans, and peptides contg. this motif altered calcineurin activity in vitro. Interestingly, the human CBP1 homolog DSCR1 is encoded by the Down's syndrome candidate region interval on chromosome 21, is highly expressed in the heart and central nervous system, and may play a role in calcineurin functions in heart development, neurite excension and memory.
REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 11:33:50 ON 16 NOV 2002)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 11:34:13 ON 16 NOV 2002
L1 14036 S CALCINEURIN

L7 2 DUPLICATE REMOVE L6 0 DUPLICATES REMOVED

=> duplicate remove l3

PROCESSING COMPLETED FOR L3
L8 6 DUPLICATE REMO L3 (12 DUPLICATES REMOVED)

=> s l8 not l7
L9 6 L8 NOT L7

=> d l9 1-6 ibib abs

L9 ANSWER 1 OF 6 MEDLINE
ACCESSION NUMBER: 2002300827 MEDLINE
DOCUMENT NUMBER: 22035335 PubMed ID: 12039863
TITLE: The DSCR1 (Adapt78) isoform 1 protein ***calcipressin*** 1 inhibits calcineurin and protects against acute calcium-mediated stress damage, including transient oxidative stress.
AUTHOR: Ermak Gennady; Harris Cathryn D; Davies Kelvin J A
CORPORATE SOURCE: Ethel Percy Andrus Gerontology Center, and Division of Molecular and Computational Biology, University of Southern California, Los Angeles, California 90089-0191, USA.
CONTRACT NUMBER: AG16256 (NIA)
SOURCE: FASEB JOURNAL, (2002 Jun) 16 (8) 814-24.
Journal code: 8804484. ISSN: 1530-6860.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200206
ENTRY DATE: Entered STN: 20020604
Last Updated on STN: 20020611
Entered Medline: 20020607

AB Although DSCR1 (Adapt78) has been associated with successful adaptation to oxidative stress and calcium stress and with devastating diseases such as Alzheimer's and Down syndrome, no rationale for these apparently contradictory findings has been tested. In fact, DSCR1 (Adapt78) has not yet been proved to provide protection against acute oxidative stress or calcium stress. We have addressed this question using cross-adaptation to H2O2 and the calcium ionophore A23187, stable DSCR1 (Adapt78) transfection and overexpression in hamster HA-1 cells, 'tet-off' regulated DSCR1 (Adapt78) isoform 1 transgene expression in human PC-12 cells, and DSCR1 (Adapt78) antisense oligonucleotides to test the ability of the DSCR1 (Adapt78) protein product ***calcipressin*** 1 (a calcineurin inhibitor) to protect against oxidative stress and calcium stress. Under all conditions, resistance to oxidative stress and calcium stress increased as a function of DSCR1 (Adapt78)/ ***calcipressin*** 1 expression and decreased as gene/protein expression diminished. We conclude that cells may transiently use increased expression of the DSCR1 (Adapt78) gene product ***calcipressin*** 1 to provide short-term protection against acute oxidative stress and other calcium-mediated stresses, whereas chronic overexpression may be associated with Alzheimer disease progression.

L9 ANSWER 2 OF 6 MEDLINE
ACCESSION NUMBER: 2000436191 MEDLINE
DOCUMENT NUMBER: 20359261 PubMed ID: 10899116
TITLE: Identification and characterization of a highly conserved calcineurin binding protein, CBP1/ ***calcipressin*** , in Cryptococcus neoformans.
AUTHOR: Gorlach J; Fox D S; Cutler N S; Cox G M; Perfect J R; Heitman J
CORPORATE SOURCE: Departments of Genetics, Medicine, Microbiology, Pharmacology and Cancer Biology, and The Howard Hughes Medical Institute, Duke University Medical Center, Durham

SOURCE: EMBO JOURNAL, 2000 Jul 17 19 14 3618 29.
Journal code: 8208664. ISSN: 0261-4189.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000928
Last Updated on STN: 20000928
Entered Medline: 20000918

AB Calcineurin is the conserved target of the immunosuppressants cyclosporin A and FK506. Using the yeast two-hybrid system, we identified a novel calcineurin binding protein, CBP1, from the pathogenic fungus Cryptococcus neoformans. We show that CBP1 binds to calcineurin in vitro and in vivo, and FKBP12-FK506 inhibits CBP1 binding to calcineurin. Cryptococcus neoformans cbp1 mutant strains exhibit modest defects in growth under stress conditions and virulence, similar to but less severe than the phenotypes of calcineurin mutants. Saccharomyces cerevisiae mutants lacking the CBP1 homolog RCN1 are, like calcineurin mutants, sensitive to lithium cation stress. CBP1 shares a central peptide sequence motif, SPPxSPP, with related proteins in S.CEREVISIAE:, Schizosaccharomyces pombe, Drosophila melanogaster, Caenorhabditis elegans and humans, and peptides containing this motif altered calcineurin activity in vitro. Interestingly, the human CBP1 homolog DSCR1 is encoded by the Down's syndrome candidate region interval on chromosome 21, is highly expressed in the heart and central nervous system, and may play a role in calcineurin functions in heart development, neurite extension and memory.

L9 ANSWER 3 OF 6 MEDLINE
ACCESSION NUMBER: 2000386788 MEDLINE
DOCUMENT NUMBER: 20347037 PubMed ID: 10887154
TITLE: A conserved family of calcineurin regulators.
AUTHOR: Kingsbury T J; Cunningham K W
CORPORATE SOURCE: Department of Biology, Johns Hopkins University, Baltimore, MD 21218, USA.
CONTRACT NUMBER: GM53082 (NIGMS)
SOURCE: GENES AND DEVELOPMENT, (2000 Jul 1) 14 (13) 1595-604.
Journal code: 8711660. ISSN: 0890-9369.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200008
ENTRY DATE: Entered STN: 20000818
Last Updated on STN: 20000818
Entered Medline: 20000804

AB The protein phosphatase calcineurin mediates many cellular responses to calcium signals. Using a genetic screen in yeast, we identified a new family of proteins conserved in fungi and animals that inhibit calcineurin function when overexpressed. Overexpression of the yeast protein Rcn1p or the human homologs DSCR1 or ZAKI-4 inhibited two independent functions of calcineurin in yeast: The activation of the transcription factor Tcn1p and the inhibition of the H(+)/Ca(2+) exchanger Vcx1p. Purified recombinant Rcn1p and DSCR1 bound calcineurin in vitro and inhibited its protein phosphatase activity. Signaling via calmodulin, calcineurin, and Tcn1p induced Rcn1p expression, suggesting that Rcn1p operates as an endogenous feedback inhibitor of calcineurin. Surprisingly, rcn1 null mutants exhibited phenotypes similar to those of Rcn1p-overexpressing cells. This effect may be due to lower expression of calcineurin in rcn1 mutants during signaling conditions. Thus, Rcn1p levels may fine-tune calcineurin signaling in yeast. The structural and functional conservation between Rcn1p and DSCR1 suggests that the mammalian Rcn1p-related proteins, termed ***calcipressins*** , will modulate calcineurin signaling in humans and potentially contribute to disorders such as Down Syndrome.

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:642908 CAPLUS

[illegible]
CORPORATE SOURCE: [illegible]
SOURCE: 2002 165 pp. Avail.: UMI, Order No. DA3028234
From: Diss. Abstr. Int., B 2002, 62(10), 4311
DOCUMENT TYPE: Dissertation
LANGUAGE: [illegible]
AB [illegible]

L9 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:275023 BIOSIS
DOCUMENT NUMBER: PREV200200275023
TITLE: Transgenic overexpression of ***calcipressin*** 1 inhibits angiotensin II and thyroxine-induced cardiac hypertrophy.
AUTHOR(S): Kaji, Eugene H. (1); Ryeom, Sandra; Wu, Justina C.; McKeon, Frank D.
CORPORATE SOURCE: (1) Harvard Sch of Public Health, Boston, MA USA
SOURCE: Circulation, (October 23, 2001) Vol. 104, No. 17 Supplement, pp. II.280. http://circ.ahajournals.org/. print.
Meeting Info.: Scientific Sessions 2001 of the American Heart Association Anaheim, California, USA November 11-14, 2001
ISSN: 0009-7322.
DOCUMENT TYPE: Conference
LANGUAGE: English

L9 ANSWER 6 OF 6 SCISEARCH COPYRIGHT 2002 ISI (R)
ACCESSION NUMBER: 2001:936740 SCISEARCH
THE GENUINE ARTICLE: 487UW
TITLE: Transgenic overexpression of ***calcipressin*** 1 inhibits angiotensin II and thyroxine-induced cardiac hypertrophy
AUTHOR: Kaji E H (Reprint); Ryeom S; Wu J C; McKeon F D
CORPORATE SOURCE: Harvard Univ, Sch Publ Hlth, Boston, MA 02115 USA; Harvard Univ, Sch Med, Boston, MA USA; Massachusetts Gen Hosp, Boston, MA 02114 USA
COUNTRY OF AUTHOR: USA
SOURCE: CIRCULATION, (23 OCT 2001) Vol. 104, No. 17, Supp. [S], pp. 280-280. MA 1346.
Publisher: LIPPINCOTT WILLIAMS & WILKINS, 530 WALNUT ST, PHILADELPHIA, PA 19106-3621 USA.
ISSN: 0009-7322.
DOCUMENT TYPE: Conference; Journal
LANGUAGE: English
REFERENCE COUNT: 0

=> d his

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FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 11:34:13 ON 16 NOV 2002
L1 14036 S CALCINEURIN
L2 28 S L1 (P) (ENDOGENOUS INHIBITOR)
L3 18 S CALCIPRESSIN
L4 229 S CSP 1
L5 0 S L4 (P) L2
L6 2 S L3 (P) (NUCLEOTIDE OR ENCODING SEQUENCE)
L7 2 DUPLICATE REMOVE L6 (0 DUPLICATES REMOVED)
L8 6 DUPLICATE REMOVE L3 (12 DUPLICATES REMOVED)
L9 6 S L8 NOT L7

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COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	31.04	31.25